

**Abstract**

An active control system and method for controlling the position and/or properties of optical components in an optical switch of an optical communications network is provided. The active control system utilizes a power-sharing scheme to  
5 provide an array of supervisory signals, which are directed through the switch to monitor and control the optical components. The supervisory signals are produced by combining the light signals emitted by an array of external light sources, and subsequently splitting the combined signal equally to form the supervisory signals.